REMARKS

STATUS OF CLAIMS

Claims 1-6 and 10-13 are now pending in this application. Claims 7-9 and 14 are withdrawn from consideration as being directed to a non-elected invention.

The continued indication that claims 6 and 13 are objected to, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims, and if noted indefiniteness is addressed, is acknowledged and appreciated.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102

Claims 1-5 and 10-12 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Johnson (USPN 5,892,847).

The rejections are respectfully traversed.

Anticipation, under 35 U.S.C. § 102, requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983).

Independent claim 1 recites, *inter alia*:

> *converting broad-range image data having a broad dynamic range* to narrow-range image data narrower in dynamic range than the broad-range image data;
> inversely converting the narrow-range image data to thereby output inversely converted image data having a same dynamic range as the broad-range image data;
> calculating difference data *representative of a difference between the broad-range image data and the inversely converted image data*; and

generating a file that relates the difference data, information relating the difference data to said step of converting and the narrow-range image data to one another.

Independent claim 10 recites, *inter alia*:

> ... *converting input image data to output image data having a smaller number of quantizing levels than the input image data* and feeding the output image data to another image processing circuitry;
> ... inversely converting the output image data to thereby produce inversely converted image data having a same dynamic range as the input image data; and
> ... calculating difference data *representative of a difference between the input image data and the output image data*;
> said at least one image processing circuitry converting broad-range image data having a broad dynamic range to narrow-range image data narrower in dynamic range than the broad-range image data,
> the narrow-range image data, the difference data and information relating the difference data to said converting circuit being recorded in said storage while being related to one another.

Thus, the present invention first converts (original) input image data to (output) having a smaller number of quantizing levels than that of the (original) input image data. This (output) narrow-range image data is then inversely converted to inversely converted image data that has the same dynamic range as the broad-range (original input) image data. However, as explained in the specification, although this inversely converted image data has the same dynamic range as the original input image data, the original input image data is not fully recovered since the lower bits that were eliminated during the initial conversion are merely represented by adding zeros at the corresponding bit locations. The present invention calculates difference data representative of a difference between the original input image data and the inversely converted image data.

The Examiner refers to elements 212 of Fig. 10 of Johnson as showing calculating the

difference data. However, the Y_tau2 miniature data is not original input image data. In fact,

color space converter 150 transforms the R_tau2 miniature 180, the G_tau2 miniature182 and the

B_tau2 miniature 184 that is output from the first Reed Spline Filter 148 into a different color

coordinate system in which one component is the luminance Y data 186 and the other two

components are related to the chrominance U and X data 188. Thus, the color space converter

150 transforms the R_tau2 miniature 180, the G_tau2 miniature 182 and the B_tau2 miniature

184 into a Y_tau2 miniature 190, a U_tau2 miniature 192 and an X_tau2 miniature 194 (see

column 11, lines 8-18 of Johnson).

However, the color space converter 150 receives the output of the first reed spline filter

148. As disclosed at column 10, lines 13-21 of Johnson:

> The first Reed Spline Filter 148, illustrated in more detail in FIG. 6, uses a two-step process to compress the formatted source image 100. The two-step process comprises a decimation step performed in block 170 and a spline fitting step performed in a block 172. As explained in more detail below, *the decimation step in the block 170 decimates each color component of red, green, and blue by a factor of two along the vertical and horizontal dimensions using a Reed Spline decimation kernal. The decimation factor is called "tau."*

That is, the Y_tau2 miniature of Fig. 10 which is used to determine a difference with

reconstructed Y_tau2 miniature is not the (original) broad-range image data that is converted to

narrow-range image data. Thus, anticipation has not been established as each step/element of

independent claims 1 and 10 is **NOT** found in Johnson, either expressly described or under

principles of inherency. Consequently, independent claims 1 and 10 are patentable over Johnson,

as are dependent claims 2-5, 11 and 12, and their allowance is respectfully solicited.

RESTRICTION OF MAY 17, 2006

The Examiner required election of either Group I or II in the Official Letter dated May

17, 2006, on the ground that Groups I and II are drawn to quantization and transforms,

respectively. However, both groups are drawn to the same generic idea of reducing the bit depth

of image signals when quantized. In this regard, claim 1 is generic. If claim 1 is allowable, it is

respectfully requested that that claims 7-9 and 14 be rejoined and examined.

<u>CONCLUSION</u>

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Edward J. Wise (Reg. No. 34,523) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: May 1, 2007

Respectfully submitted,

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